

Preface

The camera is equipped with eight modes (Scene selection, Programmed, Aperture priority, Shutter speed priority, Manual exposure, Playback, Movie, Setup) for your exploration. In combination with all the above mode function, not only will this camera serve as a digital camera, but it can also be used in recording short movies and audio recording.

This camera offers 4.23 mega pixels high-quality image along with precise 32 x zoom (8 x optical plus 4 x digital). The built-in 16MB internal memory can store your images and videos. Its auto focus lens supports a macro mode from 20cm to 50cm. Normally, it can takes pictures ranging from 50cm to infinite. Through the USB cable connection, pictures can be easily transferred from the camera to the PC. It also provides an AV output function to perform the operation through TV. Continuous shooting function is also available for users to take multiple frames of scenes in quick succession. Here are its main features:

- P.A.S.M. (Playback, Aperture, Scene, Manual exposure) mode
- MPEG4 audio and video recording
- 8 x optical lens
- Electronic view finder
- Orientation sensor for still image rotate
- Popup flash
- 15 scene modes
- Histogram on display
- Cropping and frame editing function with 6 frames to choose from
- 3x3 image thumbnail display
- Built-in speakers

To make the best out of this camera, we strongly suggest that you read through this manual prior to operating this camera.

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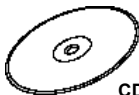
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Prior to Operating the Camera

Setting up this digital camera is quick and simple. Follow these steps, and you'll be on your way to infinite boundaries.

Unpacking the Camera

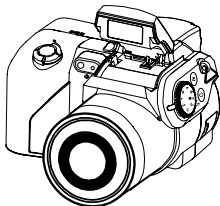
1. Clear all items from the box. (It is highly recommended that the box and wrappings are kept for future usage)
2. Double check for the following items:



CD-ROM



Mini USB Cable



Camera



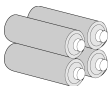
Video Cable



Shoulder Strap



Lens cap

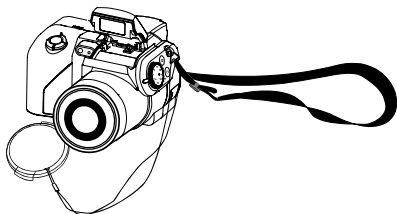


Batteries

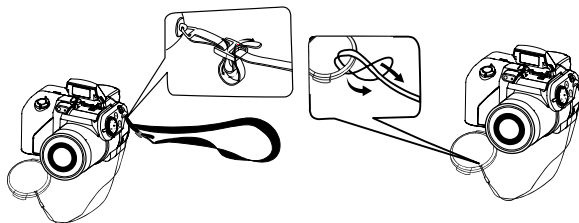


User Manual

Attaching the lens and strap on the camera

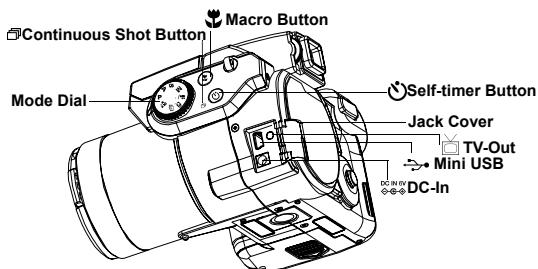
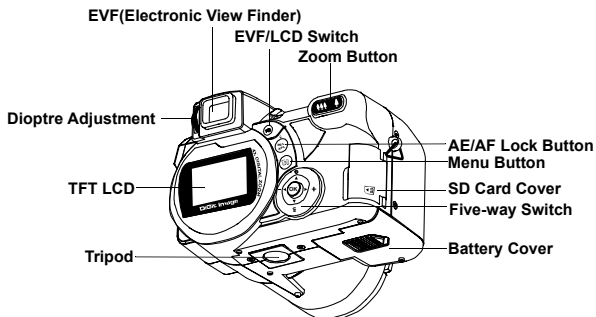
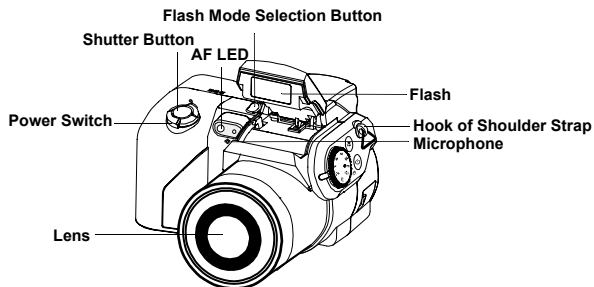


The lens cap and strap are attached in one. To remove or cap the lens cap, press on both sides of the retractable knob.



Thread the strap through the strap hole of the camera and the lens cap. Adjust the strap to the desired length.

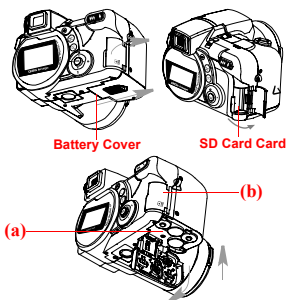
Identifying Components



Loading the Batteries and SD Memory Card

This camera uses 4 AA batteries or CR-V3 x 2. The batteries and SD card are located in separate compartments. The battery compartment is located at the bottom of the camera, while the SD card compartment is located at the back of the camera.

1. Slide the battery card cover in the direction of the arrow, then lift to open.
2. Load the batteries into the battery compartment. (a)
3. Close the battery cover.
4. Flip the SD card compartment cover, and insert the SD card into the slot. (b)
5. Close the SD card cover.



CAUTION!

1. Use only the specified battery or AC power adapter (6.0V 2A) with this camera. Other power sources may cause fire.
2. To improve battery performance, replace all installed batteries at the same time and keep battery away from heat.
3. To dispose of batteries, please refer to index of battery manufacturer.
4. Do not mix battery types or it may cause a fire or explosion. Use only one battery type at one time.
5. Batteries should be inserted in the battery compartment with the "+" and "-" sides facing correctly.
6. For alternative power source, the optional AC Adapter kit is available.

NOTE:

1. Upon loading new batteries, users will need to reset their Basic Settings.
2. Do not open the battery cover or remove the batteries when the camera is in its ON status. Only remove the batteries and SD card when the camera is not in use, or in its OFF status.
3. If you do not plan on using the camera for a long period of time, please remove the batteries and SD card.

Basic Settings

Upon turning the camera ON, a "welcome image" will appear on the LCD display. Turn the mode dial to the Setup Mode. Please proceed with the following settings:

Language Preference Setting

There are a total of nine languages to choose from to interact with this camera. Please refer to Setup Mode. (Page 25)

Date and Time Setting

Please refer to the Date and Time setting under Setup Mode. (Page 23)

Formatting the Internal Memory and SD Card

To take more pictures effectively, format the content of the SD Card. To format SD card, please insert your compatible SD card into SD slot. Then proceed with the following steps:

1. Turn the Mode Dial to Setup Mode.
2. Press the Menu button to enter Setup menu to select "Format".
3. You will then be asked "Format SD card?" on the LCD Display.
4. Press the OK button to confirm and proceed with formatting.

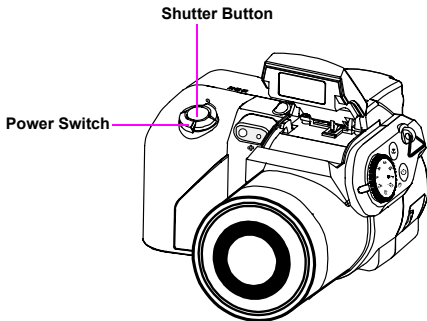
As a result, once you withdraw the SD Card from the camera, the LCD display will show the following message for confirmation: "Format internal memory?" Then, press OK button to complete formatting internal memory.

Basic Operating Procedure

This section provides simple and basic directions to get you started with your camera. From this section, you will learn how to turn the camera on and off, shoot pictures, use the Auto Focus function, Zooming In and Out, and Playback your pictures. A description is also included for the EVF & LCD function.

Turning the Camera On/Off

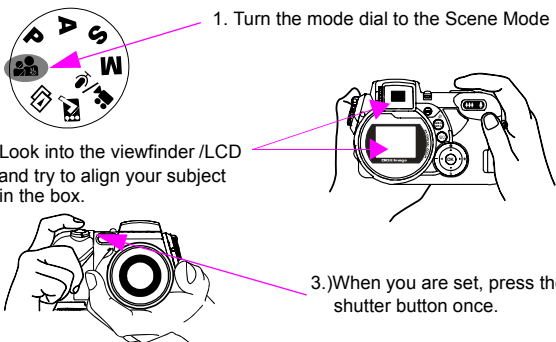
1. Remove the lens cap
2. Slide the Power switch in the direction of arrow.
 - power LED lights up and the power is on.
 - turning off the power (slide the switch again)
 - Auto power-off function operates when batteries are used only.



****The backside LED indicator will remain green while the power is turned on****

Tip: The LCD display will warn users to open the lens cap when the lens cap is on.

Basic Shooting

1. Turn the mode dial to the Scene Mode
 - 2.) Look into the viewfinder /LCD and try to align your subject in the box.
 - 3.) When you are set, press the shutter button once.
- 

Tip: Do not cover the lens or flash with your finger.

Auto-Focus Function

When the shutter release is pressed halfway, the Auto-Focus function will activate and the camera lens will automatically focus. Follow these steps to activate this function:



1. Under normal situation, the crop mark is yellow. Once the shutter is pressed halfway to activate the Auto-Focus function, the crop mark will turn green. If it fails, the crop mark will turn red.



2. Fully press the shutter button to take the picture.

Zooming In/Out

This camera has 8 x optical zoom and 4 x digital zoom. The zoom bar located on the right side of the LCD display, informs users of the zoom status while the zoom in or out button is pressed. While the zoom button is pressed, there will be 15 levels of zoom magnifications, from W(Wide) to T(Tele) of zoom bar; The zoom lens can automatically protrude and retract. An additional 8 levels of zoom magnification (0.5x/each), from

T(tele)to 4x (4x Digital Zoom) of zoom bar will activate, when the zoom button is pressed. Users can see the result from LCD display.

1. Once you have aligned your subject in the LCD display, press the zoom in or out button to select your preferred distance.

Viewing Pictures

To instantly view the pictures you just took, simply turn the mode dial to the Playback Mode. For an in-depth description of Playback Mode, please refer to page 18.

Protect Pictures

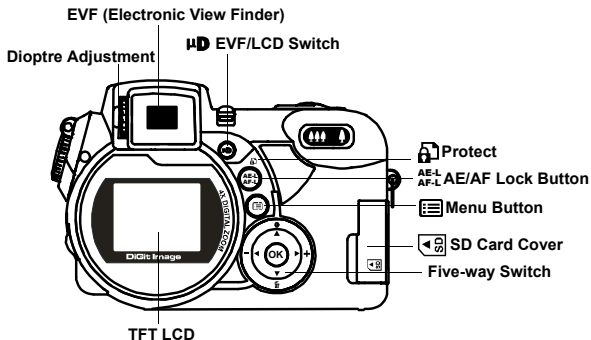
To instantly protect the pictures you just took, press the menu button and select the protect function. To protect pictures under playback mode, press the AE/AF/protect button and press ok.

Erase Pictures

To instantly erase the picture, turn the mode dial to the Playback Mode, then press the down button and OK to delete the current picture.

Basic Functions Buttons

The camera includes the following basic functions.



AE-L AF-L **AE/AF lock and Protect:** These three functions can be activated under this button. Under playback mode, press this button to protect the picture. AE lock locks the exposure at a different place from the point of focus. After locking the exposure, you can recompose the shot while maintaining the desired exposure level. AF lock locks the focus on the subject and recomposes the shot. This is useful for backlight and spotlighted subjects.

AE Lock: Press "L" button once for AE lock

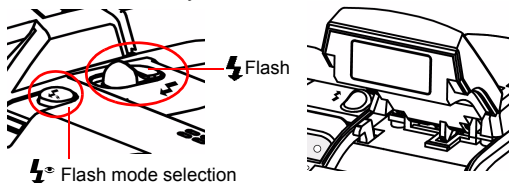
AF Lock: Press "L" button twice for AF lock

Normal: Press "L" button again for normal

Tip: AF button locks the focus object for a sequence shooting. S1 only can proceed AF lock for only one image, but next.

 **Menu:** This button allows quick access to the menu function.

 **Flash:** This button sets flash as Force off / Auto Red eye reduction / Force on / Slow. To activate the first strobe, press the flash button for flash mode selection and select the desired flash setting. The flash button will have to pop up in order to activate the flash mode. If not, the flash will not function and users will not be able to select the type of flash. When the flash pops up, the default setting will be force on, followed by Auto, Slow and Off.



Force on: Press flash button for force on. This is also the default setting.

Auto Red eye reduction: Press flash button once for auto red eye reduction

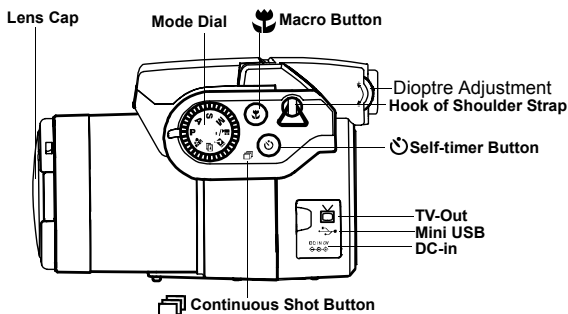
Slow: Used for slow shot

Force off: When the flash is off

Tip: Push down the flash pop-out when not in use.

EVF/LCD: This button allows users to switch in between the LCD and EVF (Electronic View Finder) to operate this camera.

Dioptre Adjustment: This enables users to adjust the far or nearsightedness of the viewfinder.



Macro: The macro function allows users to take close-up pictures in a distance within 20cm to 50cm. Press the Macro button to access Macro function.

Self-timer: The self-timer function is used in capture and video mode with a time frame of 3 to 10 seconds. A tripod is highly recommended when setting the self-timer to 3 seconds.

Continuous shot: This function allows 3 continuous shot. Turn the mode dial to P. A. S. M. & scene mode. press selftimer/continuous shot button twice, and press the shutter button.

Note:

1. Flash will not be available under continuous mode.
2. During the shooting, images will not display on the LCD.
3. The focus and white balance are adjusted for the first image, which will also be used for the other images.
4. Continuous shot and self-timer share the same button.



Zoom: This camera has 8 x optical zoom and 4 x digital zoom.

Resolution	Digital Zoom
8.0M (3264 x 2448)	x1
6.0M(2880 x 2160)	x 1
4.0M (2272 x 1704)	x 4
2.0M (1600 x 1200)	x 4
1.3M (1280 x 960)	x 4
VGA (640 x 480)	x 4

Under Capture Mode:

Zoom in: Press Zoom in button for magnify image

Zoom out: Press Zoon out button for narrow the image

Under Playback mode: (Magnify / Thumbnail)

Zoom in: Press Zoom in button for magnify image

Zoom out: Press Zoon out button for thumbnail (3x3)



EVF/LCD Display: This button allows you to turn the display On or Off for the electronic view finder & LCD. When EVF is selected, LCD will not be on.

Tip:**HV / Histogram Value**

Histogram Value showing the brightness and contrast of the subject. It enables precise exposure control. In playback mode, histogram showing the brightness and contrast information of recorded pictures. You can set. histogram display by pressing up on the five-way switch in shooting and playback modes.



Eight Main Modes and Instructions

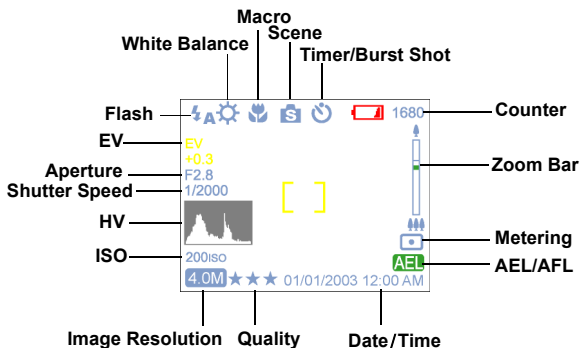
This section will describe the eight modes included in this camera. An in-depth coverage of these modes will be further described. Under each of the following modes, users can choose to proceed with the modes either by looking at the LCD or through the electronic view finder. To switch between the electronic view finder or LCD, press on the EVF/LCD button.

Items	Indications	Page
Scene Mode 	Auto    Auto Sport Landscape Night    Portrait Self Portrait Night Portrait     Sunset Beach Back Light Autumn     Natural Sky Party Text	13
Program mode 	   <u>Image Quality</u> <u>Resolution</u> <u>White Balance</u>    <u>Digital Filter</u> <u>ISO Rating</u> <u>Metering</u>   <u>Focus Area</u> <u>L/R Adjustment</u>	
Aperture priority mode 	   <u>Image Quality</u> <u>Resolution</u> <u>White Balance</u>    <u>Digital Filter</u> <u>ISO Rating</u> <u>Metering</u>   <u>Focus Area</u> <u>L/R Adjustment</u>	

Shutter speed priority mode 	 <u>Image Quality</u>  <u>Resolution</u>  <u>White Balance</u>  <u>Digital Filter</u>  <u>ISO Rating</u>  <u>Metering</u>  <u>Focus Area</u>  <u>L/R Adjustment</u>	
Manual expo- sure mode 	 <u>Image Quality</u>  <u>Resolution</u>  <u>White Balance</u>  <u>Digital Filter</u>  <u>ISO Rating</u>  <u>Metering</u>  <u>Focus Area</u>  <u>L/R Adjustment</u>	14
Playback Mode 	 <u>Erase</u>  <u>Protection</u>  <u>Rotation</u>  <u>Frame Editing</u>  <u>Crop Picture</u>  <u>Slide Show</u>  <u>Voice Memo</u>  <u>DPOF</u>	18
Movie and Audio Mode  	 <u>Movie Recording</u>  <u>Audio Recording</u>	21

Setup Mode	 <u>Date and Time</u>  <u>Self-timer Option</u>  <u>Slide show Interval</u>  <u>Audio Value</u>  <u>Sound Effect</u>  <u>Instant Preview</u>  <u>Rotation</u>  <u>Auto Power Off</u>  <u>Background Editing</u>  <u>Languages</u>  <u>TV-Out</u>  <u>Format</u>  <u>File Number</u>  <u>Restoring</u>	22
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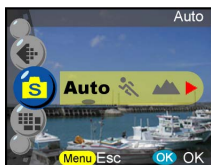
Scene Mode



Turn the dial rotator to the Scene Mode. Press the Menu button to access. Press Up/Down arrow to select the settings. Once you have selected the option, press Left/Right arrow to adjust the setting. Press OK to return to the list of options.

Scene

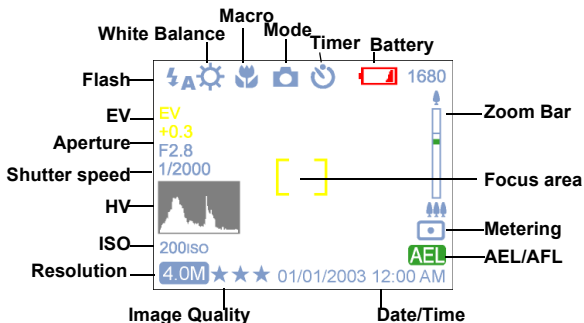
Users can select from the following scenes to include in their pictures: Auto/Sport/Landscape/Night/Portrait/Self Portrait/Night Portrait/Sunset/Beach/Back light Autumn/Natural/Sky/Party/Text



-  **Sport-** This is for fast-moving subjects when you want to freeze the action.
-  **Landscape-** This is used for wide scenic views. This setting cannot be used under macro setting.
-  **Night-** Night scenes. A tripod is recommended when using this setting.
-  **Portrait-** This mode blurs the background to focus on the subject.
-  **Self Portrait-** Enables you to take a picture of yourself while holding the camera. Point the lens towards you and take a shot.
-  **Night Portrait-** This mode is for images taken during twilight or at night. The flash illuminates the subject while a slow sync speed captures a natural exposure of the background. A tripod is recommended when using this setting.
-  **Sunset-** To enhance the red hue for taking sunset picture.
-  **Beach-** This is for taking beach view with enhanced blue color.
-  **Back light-** For taking the picture of back light object by changing metering.
-  **Autumn-** This is for foliage views.
-  **Natural-** This is suitable for forest or grasslands views.
-  **Sky-** This is for sky views.
-  **Party-** Enables you to take pictures under a darker environment with different lighting. A tripod is recommended when using this setting.
-  **Text-** This mode will project the text by enhancement of the black and white contrast.

Tip: Users can also change the resolution and image quality under Scene Mode.

P.A.S.M. Mode



P.A.S.M. Mode include four modes that are adjustable through the mode dial.

P mode- This mode allows you to take general still pictures. The camera will automatically set the aperture and shutter speed to suit the scene's brightness.

Aperture Priority- The Aperture value that can be selected from F2.8 to F3.41.

Shutter Priority- In this mode, the shutter speed can be select from 1/2000 sec to 16.

Manual- In this mode, you set both the shutter speed and the aperture value. The exposure level can be viewed on the LCD.

Tip: The larger or brighter the aperture value (lower f/ number) the more blurred the background will become.

Resolution

This mode allows you to set the record resolution.

8.0M (3264 x 2448)

6.0M (2880 x 2160)

4.0M (2272 x 1704)

2.0M (1600 x 1200)

1.3M (1280 x 960)

VGA (640 x 480)

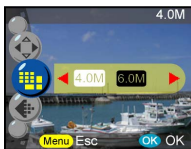


Image Quality

The widely-used JPEG format is used for image-recording quality setting. Users can select from the following quality:

★ ★ Best

★ ★ Better

★ Basic



White Balance

Normally, the "Auto" WB setting will set the optimum white balance automatically. If natural colors cannot be obtained with auto WB, you can set the white balance manually to suit the respective light source. Users can select the following white balance:

Auto:Auto

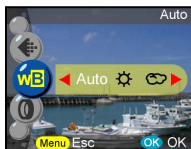
☀ :Sun

☁ :Shade

💡 :Tungsten

💡 :Fluorescent

👆 :One-touch WB



Tip: (Follow these steps for One-touch WB)

1. Press OK to confirm one-touch WB.
2. To set the desired WB press the L/R button to change the WB value.
3. Take pictures by pressing the shutter button with the new WB setting.
4. To reset WB again, press "OK" button again.

Digital Filter

This sets and converts according to the different colors and effects: Normal/BW/Sepia/Red/Pink/Purple/Blue/Green/Yellow/Solarize/Negative Artwork

Solarize-This effect creates the impression that the image has been exposed to light.

Negative Artwork- Having the light and dark parts opposite to what they were in the original picture.



ISO Rating

The ISO speed is the sensitivity to light. The higher the ISO speed number, the higher the sensitivity is to light.

Auto

50

100

200

400



Metering

This calculates the best overall exposure value. The camera has three metering modes :

 :Matrix

 :Center

 :Spot

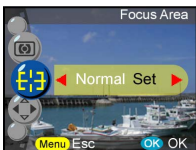


Focus Area

User can change the crop mark location of LCD display by rotator, it provides a widely focus area setting.

Normal

Set



Tip: (Follow these steps for Focus Area)

1. The crop mark will be removed once the focus area function is confirmed.
2. Select the desired focus area using the joystick.
3. Press OK or S1 to confirm the setting and start taking pictures.
4. Focus area function can proceed after taking shot, users can continue to move the focus area.
5. Press menu again to exit the focus area function.
6. By pressing the ok button, the focus setting will be saved.

L/R adjustment

For users to define the adjustable parameter of L/R button, once the setting is complete, users can press L/R button to change the value after quitting menu. Here are the 5 parameters:



EV- Exposure compensation is used to alter the camera's standard exposure setting. You can darken or lighten the image. (increased exposure)



Sharpness- Enhances the borders of the subject.



Saturation- Saturation is the degree of color intensity associated with color's perceptual difference from a white, black or gray of equal lightness



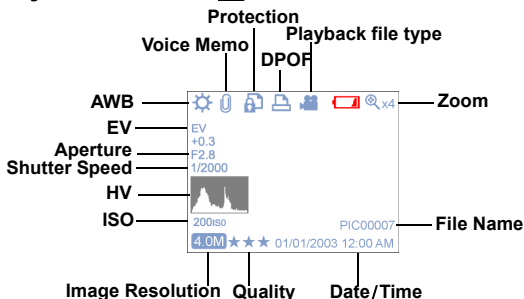
Contrast- Exaggerate lightness differences between foreground and background colors



Manual WB- Manually adjusts fine changes to the white balance.



Playback Mode

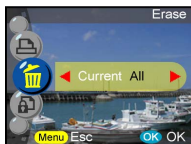


Turn the mode dial to the Playback Mode. Users can view the images by pressing the Left/Right button or press up button to get the image information. To view thumbnails and magnify pictures, press zoom in/out button. Users will be able to set the following functions after entering menu.

Erase

User can erase current or all images under this mode. Users can select to erase:

- Erase Current
- Erase All

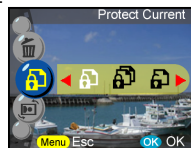


Tip: To immediately delete a picture while reviewing images, press the menu button, select the erase option and press ok.

Protection

You can prevent images from accidental erasure. This function choose to:

-  :Protect Current
-  :Protect All
-  :Unprotect Current
-  :Unprotect All



Rotation

This function rotates images 90° and 270° clockwise, mirror, or flip the image up.

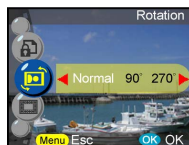
0 degree

90 degree

270 degree

Mirror

Flip up



Frame Editing

This camera provides 6 frames for image editing. Camera will create a new image with the frame which select by user.



Crop Picture

Users can crop images through the desired magnified area.

- Press ok to confirm the image selection and start the modification.
- The navigation arrows will appear on screen.
- Use joystick and zoom button to navigate the image.
- Press ok button to crop.



Tip:

- Camera will create a new image which cannot be re-cropped.
- Image size will vary according to the cropping

Slide Show

Allow user to slide show all images.

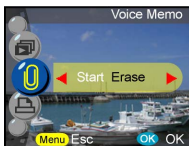


Tip:

- press OK button for interruption.
- refer to page 23 (slide show internal setting) to the slide show timing setting

Voice Memo

This function provides 20 seconds voice memo for still image. Select "Voice Memo" and press OK to start the recording session. A recording bar will indicate how much time is left in the recording session. Press OK to end the recording.

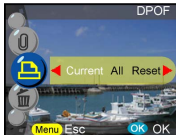


Tip: To view the recorded memo, quit menu and press OK again to enter control bar. Press "erase" to delete any voice memo.

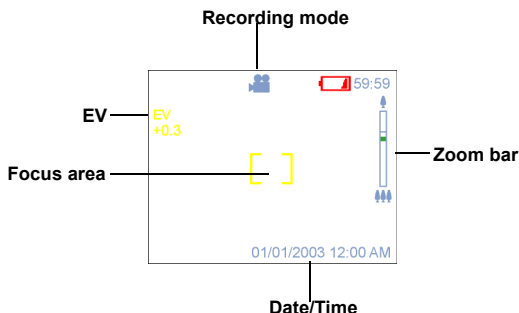
DPOF

DPOF is a format used to record automatic print information from cameras. By specifying which pictures are to be printed, the pictures can be printed easily by DPOF-compatible printing service labs or on a personal DPOF-compatible printer. Users can select to print:

Current
All
Reset



Movie and Audio Mode



Movie and Audio Mode allows you to use the camera as a movie and audio recorder. Video mode is the default for this mode, press the ok button to enter this mode. Users can switch modes by pressing the menu button. Rotate to the Video/Audio mode.

To record video:

1. Press the shutter to start recording.
2. To stop recording, press the shutter button again.

To record audio:

1. Press the right button, where a audio recording frame will appear on the LCD/EVF.
2. Press the shutter button to start audio recording.
3. To exit audio recording, press the shutter button.

Note!

1. Flash will not function when shooting movies.
2. Zoom function can not be achieve while recording.
3. Press the self-timer button once to activate the Self-timer. You will have 3 to 10 seconds to get ready after pressing shutter button..The countdown will be displayed on the LCD and followed by a beep sound.
4. The icons can be removed from the display by pressing the up button once.

- Tip:** 1. The file format of movie will be MPEG 4. (.asf)
 2. When you playback video in PC, system will require Windows Media Player 9.0 codec. Please link to Microsoft server for the codec, or you can playback the movie through bundled application software.

Setup Mode

Turn the mode dial to the Setup Mode. Press the Up/Down button to select the function, press the Left/Right button to choose the desired setting and press OK to confirm.

Users will be able to set the following functions:

Date and Time

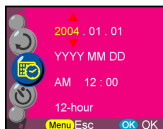
Reset date and time when change battery. Users can select to set:

Date

Date format

Time

Time format



Tip: Dates can be set in these formats:

YYYY/MM/DD

MM/DD/YYYY

Time can be set in these format:

12hr

24hr

Self-timer Option

This function provides users different timer setting. 3 sec. A tripod is highly recommended when operating this function:

3 seconds

10 seconds



Slide show Interval

Under this setting, users can set the interval of seconds they want the slide show to proceed per slide. Users can select:

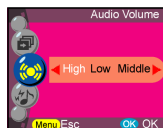
- 3 seconds
- 5 seconds
- 10 seconds



Audio Value

Users can adjust the audio value of audio, video and voice memo functions.:

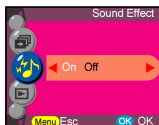
- High
- Middle
- Low



Sound Effect

This function allows users to turn the sound effect on or off:

- On
- Off



Instant Preview

Sets the time for the picture to be previewed right after the picture is taken:

- 1 second
- 3 seconds
- 5 seconds
- Off

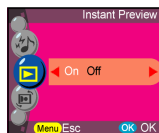
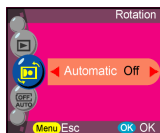


Image Rotation

When shooting the picture vertically (over 45 degree) the image can be automatically rotated and display horizontally in playback mode:

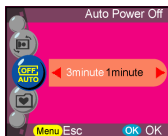
1. Automatic (default)
2. Off



Auto Power Off

This setting automatically turns off the camera. Users can select the following minutes to Auto Power Off the camera.

- Off
- 3 minutes
- 1 minute

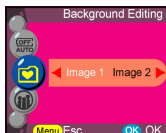


Tip: Prior to shutting off, the LCD will shut itself automatically

Background Editing

Allows users to select their preferred image or taken photo as background.

- Image 1
- Image 2
- My Photo
- Editing



Tip: This background will be replaced the default images of welcome page and setup mode background. My photo will retain last set photo. To change new photo, select editing for thumbnails and press OK button to confirm new photo.

Languages

Users can select from the following languages:

English
German
French
Spanish
Italian
Japanese
Korean
Simplified Chinese
Traditional Chinese



TV out

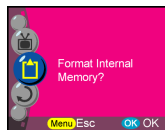
Depending on where your location, different region requires different system for TV-out function. Connect Video cable for TV out.

NTSC
PAL



Format

Formats the internal or external memory. Press OK button to confirm or menu button to escape formatting.



File Number

The image count will restore to zero once the pictures in memory been erased under reset condition. Sets the order of pictures stored in the camera:

Reset- File number counting from zero

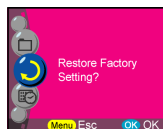
Series- File number counting from serial number



Tip: This setting will retain until user to change the selection.

Restoring

Resets the camera to factory setting.



Making Connections

In this section you will be able to connect the camera to your PC to download or edit photos.

Installing Software

1. Insert the CD-ROM into your CD-ROM drive.
2. Click "Digital Camera Driver" and Install if your operating system is Windows 98. Users can pick 4 selections and press Install (it can all be done at the same time).
3. The installation wizard will guide you through the installation.
4. You will be able to use the application once it's installed.

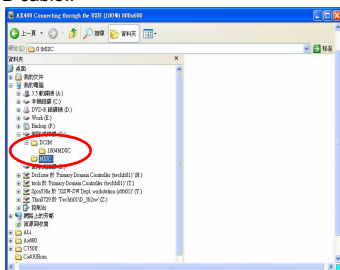


Caution:

1. Driver is for uploading pictures to you computer, if the operation system is Win 98
2. If you didn't install the driver before plugging in the USB device. System will detect new device. Please insert the CD-ROM and complete the driver installation.

Connecting through the USB

This section will show you how to download images from camera to PC through the USB cable..



1. This camera allows users to move the images or movies from camera to PC by MISC support.
2. When the camera is connected to your PC, there will be 2 external storage under "My computer" named "DCIM".
3. Simply click the folder named "1004MDSC", you can find the recorded files.
4. Copy or remove these files from the camera to your PC. Users can edit these images accordingly.

NOTE:

1. Voice memo files will include three different file format as ".jpg", ".wav" and ".html". Which have the same file name, but format. The recommended format for users (desiring to include their recorded voice memo in their selected pictures) is HTML.
2. You may find the recorded files of internal and external memory from 2 external storage respectively.

Connecting through AV-out

Before you proceed, please determine your corresponding AV-Out mode. This camera will enable you to achieve full camera functions by AV-out connection. User can enable each function through the TV monitor instead of the LCD display.

1. Connect the video cable into the video out connector.
2. Connect the other end of the video cable into the TV's video-in jack.
3. Turn the camera ON, you should then be able to operate the camera with TV screen. (The LCD/EVF will turn off while connected to AV-out)

Appendix

Camera Default Setting

Scene Mode	Auto
Movie Mode	Video
Resolution	4M (2272 x 1704)
Image Quality	***
White Balance	Auto
Digital Filter	Color
ISO	100
Metering	Matrix
Sharpness	Middle
Date and Time	2004/1/1
Self-timer Option	10 seconds
Slide Show Interval	3 seconds
Audio Value	Middle
Sound Effect	Off
Instant Preview	Off
Image rotation	automatic
Auto Power Off	1 minute
Display	LCD panel on
Background Editing	Image 1
Languages	English
AV-out	NTSC
File Number	Series

LED Status

Camera Condition	Status LED	AF/Timer LED	LED Behavior
Power off	Off	Off	-
Standby	Green	Off	"Green" LED will be turned off when snap, LED will be lighted again when ready for moving.
Strobe charging	Orange (Flicker)	Off	When recharging, "Orange" LED will be flickered and turned to "Green" when charging ready.
Processing	Green (Flicker)	Off	Processing are meant that "Green" LED will be flicker under AF process and saving image.
Warning/ Error	Red (Flicker)	Off	If error, then LED will be changed from "Green" to "Red" flicker. The "Red" LED will stop flicker and turn to "Green" after one sec.
Out of focus	Red (Flicker)	Off	If error, then LED will be changed from "Green" to "Red" flicker. The "Red" LED will stop flicker and turn to "Green" after one sec.

Battery low	Red (Flicker)	Off	Note: The "Red" LED will keep flickering in battery low condition.
USB plug in	Green	Off	" Green" LED will be off and turn on again when USB plug-in ready.
TV-out	Green	Off	" Green" LED will be off and turn on again when TV out connecting ready.
Self-timer	Green	Red (Flicker)	"Timer" LED will be flicker with count-down second.
Auto focus	Green	Off	Press S1, "Green" LED will be flickered till AF successful. If NG, then LED will be turned to "Red" and releasing button for normal. (" Green")
Video/Audio recording	Red (Slow Flicker)	Red (slow Flicker)	When recording video/audio, the "Red" LED will be flicker slowly.

Information Code

Error	Possible Cause	Corrective Action
Card Full	No more pictures can be stored	Remove the pictures or insert another card

Write-Protect	Card has been protected	To remove write-protect latch of card
Card Error	Cannot record, playback or erase pictures on this card	To format this card or replace another card
Picture Error	This recorded picture cannot be playback with camera	To view the image through PC. If it cannot be done, the picture is damaged
No picture	There's no image in storage, so there's nothing in playback	To take pictures or insert another card with images
Card Setup	This card is not formatted	To format this card before using
Battery Empty	Battery low for taking pictures	Installing new or charged batteries

Specifications

Features	Content
Max. Resolution	3264 x 2448
Still Image Size	8.0M (3264 x 2448) 6.0M (2880 x 2160) 4.0M (2272 x 1704) 2.0M (1600 x 1200) 1.3M (1280 x 960) VGA (640 x 480)
Image Sensor	CCD
Sensitivity equivalent	ISO Auto, 50, 100, 200, 400

Lens Aperture	Wide : F2.8 to F5.58 Tele : F3.41 to 6.82
Optical Zoom	8x optical zoom
Digital Zoom	Up to 4x digital zoom
Viewfinder	Electronic Viewfinder (color) Dioptre adjustment
Shutter speed	16 sec ~ 1/2000 sec.
Internal Memory	16MB NAND
Estimated number of storable pictures	8.0M (3264 x 2448):2 pictures 6.0M (2880 x 2160):5 pictures 4.0M (2272 x 1704):10 pictures 2.0M (1600 x 1200):20 pictures 1.3M (1280 x 960):35 pictures VGA (640 x 480):140 pictures
Storage media	SD/MMC
Focus distance	50cm ~ infinity
Macro	20 ~50 cm
Video/Audio Clip	320 x240, 30fps, no limit
Continuous shot	20fps
Rotate	Rotates the still image 90 degree. (anti-clockwise or clockwise)
Self-timer	3 or 10 sec. self-timer
Compatibility	WIN98/ME/2000/XP MAC 9.1 and above
File Format	MPEG4/JPEG/EXIF 2.2/DPOF

Dimension	111 (W) x 70(H) x 105 (D) mm
Flash	Pop-up range: 3 -10 feet Modes: Force off / Auto Red eye reduction / Force / Slow
USB Output	B type mini USB 2.0 full speed
Video Output	NTSC/PAL
Battery type	AA Alkaline, Ni-MH, Ni-Cd, CR-V3 and RCR-V3
DC-in	6.0V 2.0A
LCD	1.6" TFT, 354 x 240
Playback Zoom	Up to 8x
USB storage class support	MSDC
Multiple languages	E/F/G/I/S/TC/SC/K/J
Tripod mount	Metal
Body material	Plastic

Accessories

User manual	A/V connecting cable
CD-ROM	Shoulder strap
AA alkaline batteries	Lens cap
USB cable	Lens cap strap